

## METHOD OF FABRICATING STRAINED Si SOI WAFERS

### ABSTRACT OF THE DISCLOSURE

A method of fabricating a strained semiconductor-on-insulator (SSOI) substrate in which the strained semiconductor is a thin semiconductor layer having a thickness of less than 50 nm that is located directly atop an insulator layer of a preformed silicon-on-insulator substrate is provided. Wafer bonding is not employed in forming the SSOI substrate of the present invention.